

## ABSTRACT

A scanning probe microscope uses two different scanners (also called "scanning stages") that are completely detached each from the other, and are physically separated by a stationary frame. One scanner (called "x-y scanner") scans a sample in a plane (also 10 called "x-y plane"), while the other scanner (called "z scanner") scans a probe tip (which is supported at a free end of a cantilever) in a direction (also called "z direction") perpendicular to the plane. Detachment of the two scanners from one another eliminates crosstalk.